

### PART 1 GENERAL

#### 1.01 SUMMARY

- A. Gateway™ Egress Doors shall be manufactured by Lawrence Roll-Up Doors, Inc.

#### 1.02 SYSTEM DESCRIPTION

- A. Doors shall be designed with selectable functions to be either "Fail-Safe" to automatically open upon alarm or power loss, or "Fail-Secure" to remain closed during power loss but automatically open upon alarm or lighted exit button to provide controlled egress [secure emergency responder access] through the opening in an emergency.
- B. Battery power shall not be necessary to automatically open doors. Opening force shall be provided by counterbalance spring(s) alone.
- C. Doors shall be for use on openings up to 20'-0" wide, 16'-0" high for typical mall, storefront, other retail and commercial, or parking garage applications. Consult factory for availability of larger size doors.
- D. Doors shall be designed for 10,000 [20,000] [50,000] [100,000] cycles usage.

#### 1.03 WARRANTY

- A. Doors shall be warranted against defects in workmanship and materials for one year [two years] from date of shipment, provided designed cycle life is not exceeded. Factory finishes are excluded from warranty.

### PART 2 PRODUCTS

#### 2.01 MATERIALS

- A. **Curtain** shall be assembled from interlocking flat slats, roll-formed from 24 [22] [20] gauge galvanized steel [18 [16] gauge aluminum] [20 gauge stainless steel] strip. [Galvanized steel slats shall be perforated with 1/8" diameter holes on 3/16" staggered centers providing 28% open area.] Malleable iron endlocks shall be riveted to ends of alternate slats.
- B. **Bottom bar** shall be a T-shape aluminum extrusion [formed by two 1/8" steel [stainless steel] angles bolted together] and attached to bottom of curtain. Vinyl weatherstrip shall be provided on bottom of bottom bar.
- C. **Guides** shall be formed steel channels sized to retain curtain, bolted to 3/16" minimum structural steel wall angles [tube supports], sized to support door. Guides shall be assembled and attached to wall with 3/8" minimum bolts no more than 24" on center. Removable curtain stops shall be provided. [Vinyl weather seals shall be provided.]
- D. **Barrel** shall be 4 1/2" minimum diameter steel pipe, sized to contain counterbalance assembly and support curtain with a maximum deflection of 0.03" per ft. of width. Counterbalance assembly shall consist of torsion spring(s) and fittings mounted to a continuous cold finished steel shaft. Grease packed sealed bearings shall be used to support each end of counterbalance assembly. Spring tension shall be adjustable by adjusting wheel outside bracket.
- E. **Brackets** shall be 3/16" minimum steel plates bolted to wall angles [tube supports]. Plates shall be sized to support curtain and barrel (and provided with 1/8" flanges for hood attachment when hood is provided). Bracket on operator side shall be fitted with a grease packed sealed bearing.
- F. **Hood** shall be formed from 24 gauge galvanized steel [stainless steel] [20 gauge (.032") aluminum] sheet with top and bottom reinforcements to reduce deflection. Intermediate support(s) shall be provided when necessary. [Vinyl weather baffle shall be provided.]
- G. **Operation** of doors shall be by a Model EGH inline gear drive motor operator, UL Listed, 1/2 HP minimum, TENV motor (AC), auxiliary chain hoist, internal speed governor, solenoid actuated brake, adjustable limit switches, delay on reverse\*, non-resettable cycle counter, adjustable reclose timer\*, 3-button open-close-stop wall mount control station requiring constant pressure to close, NEMA 1 enclosures. Motor operator shall be mounted horizontally in front of and parallel to the door coil and shall not require additional clearance above the top of the coil. Operator shall automatically open door in an emergency to a minimum height of 80 inches. Brake shall engage momentarily to stop door at full open position. After power is restored, and alarm is cleared, motor operator shall be ready to operate normally. Operator functionality shall be either 1, 2, 1 and 3, or 2 and 3 from the following:
1. Default "Fail-Safe" function shall allow door to open automatically after an approximate 10 second delay upon a loss of power or upon alarm activation [or without delay upon activation of lighted wall mount exit button if power is present].
  2. Selectable "Fail-Secure" function shall allow door to remain in the closed position upon a loss of power through an internal battery backup for approximately 8 hours [16 hours with supplemental R-BBU external battery pack]. Door shall open upon activation of a lighted wall mount exit button, upon alarm activation, or upon activation of a secure control device on entry side of door accessible to emergency responders. Door shall open automatically if battery backup fully discharges.
  3. Optional "Auto-Reclose" function\* shall close door automatically after time delay when power is restored and alarm is cleared when a monitored A2530L-M sensing edge [SRPE reflective sensor] is provided and functioning to reverse door when closing if an obstruction in the opening is detected.
- \* When momentary pressure close is required, or control is not within line of sight of the door, a monitored sensing edge on the bottom bar, or monitored reflective sensor on the guides 6" above the floor, is required to reverse the door upon sensing an obstruction in the opening.
- H. **Locking** shall be provided by gear reduction of motor operator.

#### 2.02 FINISHES

- A. Galvanized steel slats and hood shall have a baked-on primer and grey polyester top coat. Aluminum bottom bar shall be mill finish [clear anodized]. Steel bottom bar, guides and brackets shall be shop painted with a black color rust-inhibiting primer. [Aluminum slats and hood shall be clear anodized.] [Stainless steel slats, bottom bar and hood shall have a brushed finish.]

### PART 3 EXECUTION

#### 3.01 INSTALLATION

- A. Doors shall be installed in accordance with Lawrence Roll-Up Doors, Inc. installation instructions.
- B. Periodic inspection, testing & maintenance shall be performed as required by local codes for a life-safety product.